

CLAIMS

1. A disk type optical recording medium comprising a disk substrate having an information recording surface, and information tracks formed by a pit train on said information recording surface and adapted to be read by tracking control and focusing control of an optical pickup;

wherein at least a part of said information tracks has a read limiting region formed by a modified pit train that can be followed by the tracking control of said optical pickup during low-speed rotation of said medium, but cannot be followed by the tracking control of said optical pickup during high-speed rotation of said medium, thereby limiting the reading of information from said medium during high-speed rotation of said medium.

2. The disk type optical recording medium according to claim 1, wherein said modified pit train comprises a wobble having a curvature that can be followed by the tracking control of said optical pickup during low-speed rotation of said medium, but cannot be followed by the tracking control of said optical pickup during high-speed rotation of said medium.

3. The disk type optical recording medium according to claim 2, wherein said information tracks are

spirally formed on said disk substrate.

4. The disk type optical recording medium according to claim 2, wherein said wobble has an amplitude A set in the range of $TP/20 < A < TP$ where TP is the track pitch.

5. The disk type optical recording medium according to claim 2, wherein said wobble has a frequency set in the range of 10 Hz to 10 kHz.

6. The disk type optical recording medium according to claim 1, wherein said modified pit train comprises a lateral displacement of said information tracks that can be followed by the tracking control of said optical pickup during low-speed rotation of said medium, but cannot be followed by the tracking control of said optical pickup during high-speed rotation of said medium.

7. The disk type optical recording medium according to claim 6, wherein said information tracks are spirally formed on said disk substrate.

8. The disk type optical recording medium according to claim 6, wherein said lateral displacement is located regularly or randomly.

9. The disk type optical recording medium according to claim 6, wherein the distance between

adjacent pits along the same track at a position of said lateral displacement is less than or equal to $1/3$ of the track pitch TP.

10. The disk type optical recording medium according to claim 1, wherein said information tracks are concentrically formed on said disk substrate, and said modified pit train comprises a guide portion formed by a pit pattern adapted to guide a beam spot from one of said information tracks to another one adjacent thereto.

11. The disk type optical recording medium according to claim 10, wherein the distance between circumferentially adjacent pits along the same information track at said guide portion is set so that said pit pattern can be followed by the tracking control of said optical pickup during low-speed rotation of said medium, thereby allowing the shift of said beam spot to said adjacent information track, but cannot be followed by the tracking control of said optical pickup during high-speed rotation of said medium, thereby disallowing the shift of said beam spot to said adjacent information track.

12. The disk type optical recording medium according to claim 11, wherein said pit pattern is adapted to guide said beam spot from an inner one of said

information tracks to an outer one adjacent thereto.

13. The disk type optical recording medium according to claim 11, wherein the distance between said circumferentially adjacent pits along the same information track at said guide portion is set to 1 cm or less.

14. The disk type optical recording medium according to claim 1, wherein the rotational speed of said medium during low-speed rotation is the same as that of said medium rotating in a dedicated reproducing device.

15. The disk type optical recording medium according to claim 14, wherein the rotational speed of said medium during high-speed rotation is higher by a predetermined proportion than said rotational speed during low-speed rotation.

16. The disk type optical recording medium according to claim 14, wherein the rotational speed of said medium during high-speed rotation is the same as that of said medium rotating in a versatile disk drive.

17. The disk type optical recording medium according to claim 16, wherein said versatile disk drive comprises a disk drive built in a computer or provided as peripheral equipment for a computer.

18. A reproduction limiting method for a disk type

optical recording medium comprising a disk substrate having an information recording surface, and information tracks formed by a pit train on said information recording surface and adapted to be read by tracking control and focusing control of an optical pickup;

wherein at least a part of said information tracks has a read limiting region formed by a modified pit train that can be followed by the tracking control of said optical pickup during low-speed rotation of said medium, but cannot be followed by the tracking control of said optical pickup during high-speed rotation of said medium, thereby limiting the reading of information from said medium during high-speed rotation of said medium.

19. The reproduction limiting method for a disk type optical recording medium according to claim 18, wherein said modified pit train comprises a wobble having a curvature that can be followed by the tracking control of said optical pickup during low-speed rotation of said medium, but cannot be followed by the tracking control of said optical pickup during high-speed rotation of said medium.

20. The reproduction limiting method for a disk type optical recording medium according to claim 18, wherein said modified pit train comprises a lateral

displacement of said information tracks that can be followed by the tracking control of said optical pickup during low-speed rotation of said medium, but cannot be followed by the tracking control of said optical pickup during high-speed rotation of said medium.

21. The reproduction limiting method for a disk type optical recording medium according to claim 18, wherein said information tracks are concentrically formed on said disk substrate, and said modified pit train comprises a guide portion formed by a pit pattern adapted to guide a beam spot from one of said information tracks to another one adjacent thereto; and

the distance between circumferentially adjacent pits along the same information track at said guide portion is set so that said pit pattern can be followed by the tracking control of said optical pickup during low-speed rotation of said medium, thereby allowing the shift of said beam spot to said adjacent information track, but cannot be followed by the tracking control of said optical pickup during high-speed rotation of said medium, thereby disallowing the shift of said beam spot to said adjacent information track.